



Monday 10 May 2021

Content only available at main conference in Melbourne

Tuesday 11 May 2021

VENUE	EDEN PARK PLAYERS LOUNGE	EDEN PARK WEST LOUNGE F2 *	EDEN PARK WEST LOUNGE F3 *
08:00 - 09:00	Registration and coffee		
09:00 - 10:30	Conference Opening and Panel Discussion - The Importance of Kaitiakitanga to the Success of Projects		
10:30 - 11:00	Coffee and networking		
11:00 - 12:30	Opening and Plenary Session from Australia		
12:30 - 13:00	Lunch		
13:00 - 14:30	Challenges for Ground Support & Permanent Lining (1): WestConnex Project, Sydney	Innovative Construction (1): Emerging Technology	Future Proofing through project development & delivery
14:30 - 15:30	Coffee and networking		
15:30 - 17:00	Improvements in tunnel ventilation & fire life safety (1)	Challenges for Ground Support & Permanent Lining (2): Tunneling with low ground cover	Major Projects (1): TBM Tunnels
17:00 - 17:30	Coffee and networking		
17:30 - 19:00	Young Members Technical Session	Environmental assessment, stakeholder engagement, community impact & placemaking	Innovative Construction (2): Mined Tunnels

* All New Zealand presenters will be in West Lounge F3. Conference streams will be switched between West Lounge F2 and West Lounge F3 for NZ presenters.

Wednesday 12 May 2021

VENUE	EDEN PARK PLAYERS LOUNGE	EDEN PARK WEST LOUNGE F2 *	EDEN PARK WEST LOUNGE F3 *
09:00 - 10:30	Industry Workshop - What's Next for New Zealand Tunnelling?		
10:30 - 11:00	Coffee and networking		
11:00 - 12:30	Plenary Session With Australia		
12:30 - 13:00	Lunch		
13:00 - 14:30	World best practice in health, safety, risk, training & education	Major Projects (2): Case Studies	Tunnelling the last 50 years
14:30 - 15:30	Coffee and networking		
15:30 - 17:00	Challenges for Ground Support & Permanent Lining (3): TBM Tunnels	Major Projects (3): Ground Control Deformation & Settlement	Growth of digital engineering, instrumentation & tunnel data systems (1): Session 1
17:00 - 17:30	Coffee and networking		
17:30 - 19:00	Innovative Construction (3): TBM Tunnels	Challenges for Ground Support & Permanent Lining (4): Hawkesbury Sandstone	Sustainable tunnel operations, maintenance & rehabilitation
19:00 - 22:00	ATS 2020+1 Conference Dinner @ Eden Park		

* All New Zealand presenters will be in West Lounge F3. Conference streams will be switched between West Lounge F2 and West Lounge F3 for NZ presenters.

Thursday 13 May 2021

Presentations and proceedings available digitally after the conference

Friday 14 May 2021

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		EDEN PARK PLAYERS LOUNGE	EDEN PARK WEST LOUNGE F2	EDEN PARK WEST LOUNGE F3
Tuesday 11 May 2021	13:00 - 14:30	Challenges for Ground Support and Permanent Lining (1): WestConnex Project, Sydney	Innovative Construction (1): Emerging Technology	Future Proofing through project development & delivery
		<i>Hanging linings - a new approach to permanent lining design</i> Joshua Barry Aurecon Australia	<i>Increasing acceptance of chemical anchors in tunneling projects based on advanced qualification and installation methods</i> Barry Kaknics Hilti (Aust.) Pty Ltd Australia	<i>Karangahape Road Station - future proofed tunnels</i> Katerina Howard Link Alliance New Zealand
		<i>Design and construction of the M4 East caverns</i> Andrew de Ambrosis PSM Australia	<i>New technologies in concrete spraying for tunnel construction</i> Ben O'Connor Normet Australia	<i>GBR as risk management tool in the procurement of major U/G infrastructure projects</i> Bani Mukherjee Geodata Engineering Australia
		<i>Design and construction of a very large span and shallow ramp tunnel using pre-activated steel sets</i> Shijie Liu Jacobs Australia	<i>Underground Waterproofing Design and Installation – Case Studies from recent projects</i> Victor Ngo Bluey Technologies Australia	<i>Driver Needs and Behaviour in NSW Road Tunnels</i> Nigel Casey TfNSW Australia
		<i>Observational Approach to Water Resistant Lining for a Major Urban Road Tunnel</i> Mark Trim McMillen Jacobs Associates Australia	<i>Development of the Geotechnical Baseline Report for the Snowy 2.0 Pump Storage Project</i> Alexandre Gomes SMEC Australia	<i>Cross passage design and construction solutions on Metro Tunnelling Projects in Major World Cities</i> Jim Benson WSP New Zealand
Tuesday 11 May 2021	15:30 - 17:00	Improvements in tunnel ventilation and fire life safety (1): Fire Life Safety	Challenges for Ground Support and Permanent Lining (2): Tunnelling with Low Ground Cover	Major Projects (1): TBM Tunnels
		<i>De-risking the propensity of concrete spalling during fire in tunnel applications</i> Cristian Maluk University of QLD Australia	<i>Hurstbridge Line Upgrade - Stage 1 design and construction of Darebin Street underpass</i> Ben Coombes Noma Consulting Australia	<i>SFRC linings of mega TBM tunnels</i> Shu Fan Chau Aurecon New Zealand
		<i>The Evolution of Deluge System Design, Delivery, Testing and Operation in Australian Road Tunnels</i> Nigel Casey TfNSW Australia	<i>Pipe roofs for shallow tunnelling in urban environment</i> Erik Van Der Horst GHD Australia	<i>An Innovative Tool Box for Double Shield TBM Navigation</i> Matt Jarvis VMT Tunnel Guidance Australia
		<i>Design of Metro Tunnel Project tunnel linings for fire testing</i> Maurice Guerrieri Victoria University Australia	<i>Probabilistic design in tunnels: case study for a shallow tunnel in an urban area</i> Guillermo Andres Peman GHD Australia	<i>Tunnelling in Perth: the experience of the Forrestfield - Airport Link project</i> Lorenzo Facibeni Geodata Engineering, Salini, Coffey Australia
		<i>Turning tunnel smoke control on its head in Australia</i> Dr Conrad Stacey and Dr Michael Beyer Stacey Agnew Australia	<i>Long and deep hard rock TBM tunnelling under the Alps - Brenner Base Tunnel, Italian section</i> Paolo Pediconi Ghella Australia	<i>Design of tapered caverns in rail tunnels - challenges and outweighing benefits</i> Wataru Okada Link Alliance New Zealand
Tuesday 11 May 2021	17:30 - 19:00	Young Members Technical Session	Environmental assessment, stakeholder engagement and community impact and placemaking	Innovative Construction (2): Mined Tunnels
		<i>Design and Construction of Pedestrian Access Tunnels below an Existing Operational Metro Tunnels (David Sugden Paper)</i> G T, Senthilnath GHD Australia	<i>Underground rail corridor protection - assessment methodology with case studies</i> Jiping Pan WSP Australia	<i>Auckland City Rail Link Contract C3 - Tender Technical Innovations</i> Gilles Cachia Link Alliance New Zealand
		<i>SFRC Segmental Lining Code of Practice – review of international guideline and application to Australian Standards</i> Renee Shi WSP Australia	<i>Spatial complexities of groundwater assessments for long tunnel projects</i> Daniel Hodges Golder Australia	<i>Tunnel advance rates - less is more</i> Aikaterini Monemvasioti Kappos Jacobs Australia
		<i>Recent observations from the design and construction of large span tunnel in Sydney</i> Aaron Lippett Aurecon Australia	<i>Environmental assessment of ground-borne noise and vibration from tunnelling infrastructure projects</i> Mattia Tabacchi Renzo Tonin & Associates Australia	<i>Key challenges on cross passage design and construction</i> Luke Lu Aurecon Australia
		<i>Metro Tunnel - CBD South Station Cavern Construction</i> Daniel Hamilton CYP Australia	<i>Maribyrnong River Main Sewer Augmentation</i> Tanya Elliott Jacobs Australia	<i>Shotcrete specification for road tunnels in New South Wales</i> Phil Clark TfNSW Australia
		<i>Epping Main Sewer Pipejack: Challenges and Resolutions</i> Jiang Aizezi Downer Australia		
Wednesday 12 May 2021	13:00 - 14:30	World best practice in health, safety, risk, training and education	Major Projects (2): Case Studies	Tunnelling the last 50 years
		<i>Best practice in controlling respirable crystalline silica in infrastructure</i> Kate Cole Sydney Metro Australia	<i>Thomson Yarra to Western Harbour tunnel - a personal fifty-year journey</i> Doug Maconochie WSP Australia	<i>Competitive alliance procurement process for a major underground railway</i> Tom Ireland Aurecon New Zealand
		<i>The allocation of risk for tunneling projects: has progress been achieved in 50 years?</i> Charles MacDonald MacDonald Project Consulting Pty Ltd Australia	<i>Planning and feasibility design of the Inland Rail Toowoomba Tunnels</i> Tony Peglas Aurecon Australia	<i>The 50 year legacy of the Melbourne Underground Rail Loop</i> Anthony Bennett Aurecon Australia
		<i>De-risking temporary works</i> Barnabas Iiko Golder Australia	<i>Underground station design development - A case study - Cross River Rail</i> Joseph Donohue Arup Australia	<i>The development of active permanent support for infrastructure tunnels in the Sydney Region</i> Philip Pells Pells Consulting Australia
		<i>Tunnelling and Underground Risk in Hydropower – a Lender’s Technical Advisor’s Perspective</i> Andrew Noble WSP Australia	<i>Recent experiences in the design of deep tunnels in Sydney</i> Francisco Cortes SMEC Australia	
Wednesday 12 May 2021	15:30 - 17:00	Challenges for Ground Support and Permanent Lining (3): TBM Tunnels	Major Projects (3): Control of Ground Deformation and Settlement	Growth of digital engineering, instrumentation and tunnel data systems (1)
		<i>Practical Considerations for Design of Large Diameter Segmental Linings</i> Harding, Chen, Sadek Jacobs Australia	<i>Assessment of settlement impacts for the Sydney Metro City & Southwest Tunnel and Station excavations</i> Andrew Merritt PSM Australia	<i>Excavating below the Chief Post Office (CPO) at Britomart station for Auckland’s City Rail Link</i> Bill Newns NovoConsult New Zealand
		<i>Bored tunnel design for CRL Auckland - design challenges</i> Ritesh Mahajan Link Alliance Australia	<i>Sydney Metro Martin Place Station - managing predicted effects on existing tunnels with risk-based design</i> Megan Packer PSM Australia	<i>Integrated BIM approach for New Zealand’s largest railway project</i> Brice Gaudin Link Alliance New Zealand
		<i>Experimental study on the behavior of precast macro-synthetic FRC tunnel segments during temporary loading conditions</i> Todd Clarke BarChip Australia	<i>Real-time monitoring of the Metro Tunnel trinocular cavern beneath Melbourne CBD during excavation</i> C. Fagan, S. Auvergne Sixense, CYP Australia	<i>Integration of 3D geological modelling and geotechnical investigation planning for tunnel infrastructure projects</i> Kris Jelly-Butterworth GHD Australia
		<i>Numerical modelling for temporary loading during the advance of a double shield TBM in rock</i> Vincenza Floria Geodata Australia	<i>Monitoring the 3D distortion of Glass-fibre Reinforced Plastic Jacking Pipes using fibre optic instrumentation</i> Mahdi M Disfani Melbourne School of Engineering Australia	<i>Tunnelling under the Chief Post Office Building</i> Michael Chung Aurecon New Zealand
Wednesday 12 May 2021	17:30 - 19:00	Innovative Construction (3): TBM Tunnels	Challenges for Ground Support and Permanent Lining (4): Hawkesbury Sandstone	Sustainable tunnel operations, maintenance and rehabilitation
		<i>Supersize tunnel boring machine diameters for benchmarking infrastructure systems</i> Thorsten Gartner Herrenknecht Australia	<i>Bolting of wide spans in Hawkesbury Sandstone</i> Robert Bertuzzi PSM Australia	<i>A review of the refurbishment of the Terrace and Mt Victoria Tunnels, Wellington, New Zealand</i> Terry McGavin New Zealand Transport Agency New Zealand
		<i>Diverting the North Yarra main sewer - making way for the West Gate Tunnel</i> CPBJH Australia	<i>Is 1 l/s/km ingress limit appropriate for Sydney sandstone?</i> Iris Yim Aurecon Australia	<i>A rational approach to the assessment and management of over tunnel development</i> Michael Salcher PSM Australia
		<i>First Flying TBM Launch performed in AUSTRALASIA</i> Andreas Lehr CPB Australia	<i>High stress tunneling in Sydney - a design and construction case study</i> Thomas Roper University Of Queensland / Lendlease Australia	<i>A robust approach to management of cracking in plain concrete tunnel linings</i> Stephanie Salim PSM Australia
		<i>TBM Tool wear : Interactive Product of Rock Abrasiveness, Metal Properties, & Operating Environments</i> Don Del Nero Bamford Rock Testing Services Australia	<i>Recent Experiences from Design and Certification of Major Infrastructure Projects in Sydney</i> Sabrina Kost SMEC Australia	<i>Use of Driving Simulation to Assess Driver Experience and Safety of Tunnel Aesthetic Design Features</i> Nigel Casey TfNSW Australia

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